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PATENT:

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Zwolinski, David T.; Willett, Kevin R. Atty. Docket: 85939.000298  
Serial No.: 10/688,098 Examiner: Gregory J. Strimbu  
Filed: October 17, 2003 Art Unit: 3634  
Title: WEATHERSEAL HAVING A CURVILINEAR POLYMERIC BACKBONE

DECLARATION OF PRIOR INVENTION IN THE UNITED STATES TO OVERCOME CITED  
REFERENCE PURSUANT TO 37 C.F.R. §1.131

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

We, David T. Zwolinski and Kevin R. Willett are the named inventors on the above-referenced application and hereby declare as follows:

1. This Declaration is to establish (i) the conception of the invention of this application in the United States at a date prior to July 30, 2003, which is believed to be the effective date of US Patent Application Publication No. US2004/0060242, as cited by the examiner, and (ii) due diligence from a date prior to the effective date to a constructive reduction to practice by the October 17, 2003 filing the present application.

2. We are the inventors of the present application.

3. To establish the date of conception of the invention of this application, the following attached documents are submitted as evidence:

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(a) A redacted copy of two photocopied pages of drawings from an internal Invention Disclosure form of the assignee of the present application. These pages are incorporated as pages 4 and 5 of the present submission, and have been redacted to remove specific recitation of the dates and certain document identifiers. Each of these two pages was signed and dated by two witnesses, Mr. Marion A. Royse and Mr. A. John Rigby, as well as ourselves prior to July 30, 2003; and

(b) A redacted copy of four photocopied pages of the Invention Disclosure accompanying the two drawing pages is attached. These pages are incorporated as pages 6-9 of the present submission, and have been redacted to remove specific recitation of the dates and certain document identifiers. These pages of the Invention Disclosure were signed and dated by two witnesses, Mr. Marion A. Royse and Mr. A. John Rigby, as well as ourselves prior to July 30, 2003.

4. Duly diligent efforts were made from prior to July 30, 2003 through October 17, 2003, the filing date of the present application. These efforts included drafting of the present application by counsel, review and analysis of the application by ourselves, and conferences with counsel on the revisions. Each of these activities occurred between before July 30, 2003 and the October 17, 2003 filing date of the present application.

5. The diligent efforts from prior to July 30, 2003 through October 17, 2003 included the preparation and review of at least four drafts of the present application. These drafts were exchanged between patent counsel and ourselves (through assignee of the present application). Specifically, separate drafts were forwarded on or about June 11, 2003; October 9, 2003, October 14, 2003 and October 15, 2003.

6. Internal meetings of assignee, which meetings included ourselves, were conducted in September 2003, in which various design and materials considerations of the present invention were analyzed.

7. All activity establishing the date of conception of the invention and due diligence from prior to the date of the reference to the October 17, 2003 filing date of the present invention occurred in the US.

8. The attached drawings, the Invention Disclosure and this declaration establish the present invention was conceived prior to July 30, 2003 and through due diligence was constructively reduced to practice on October 17, 2003.

9. We hereby declare that all statements made of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United State code, and that such willful false statements may jeopardize the validity of the application and any patent issued thereon.

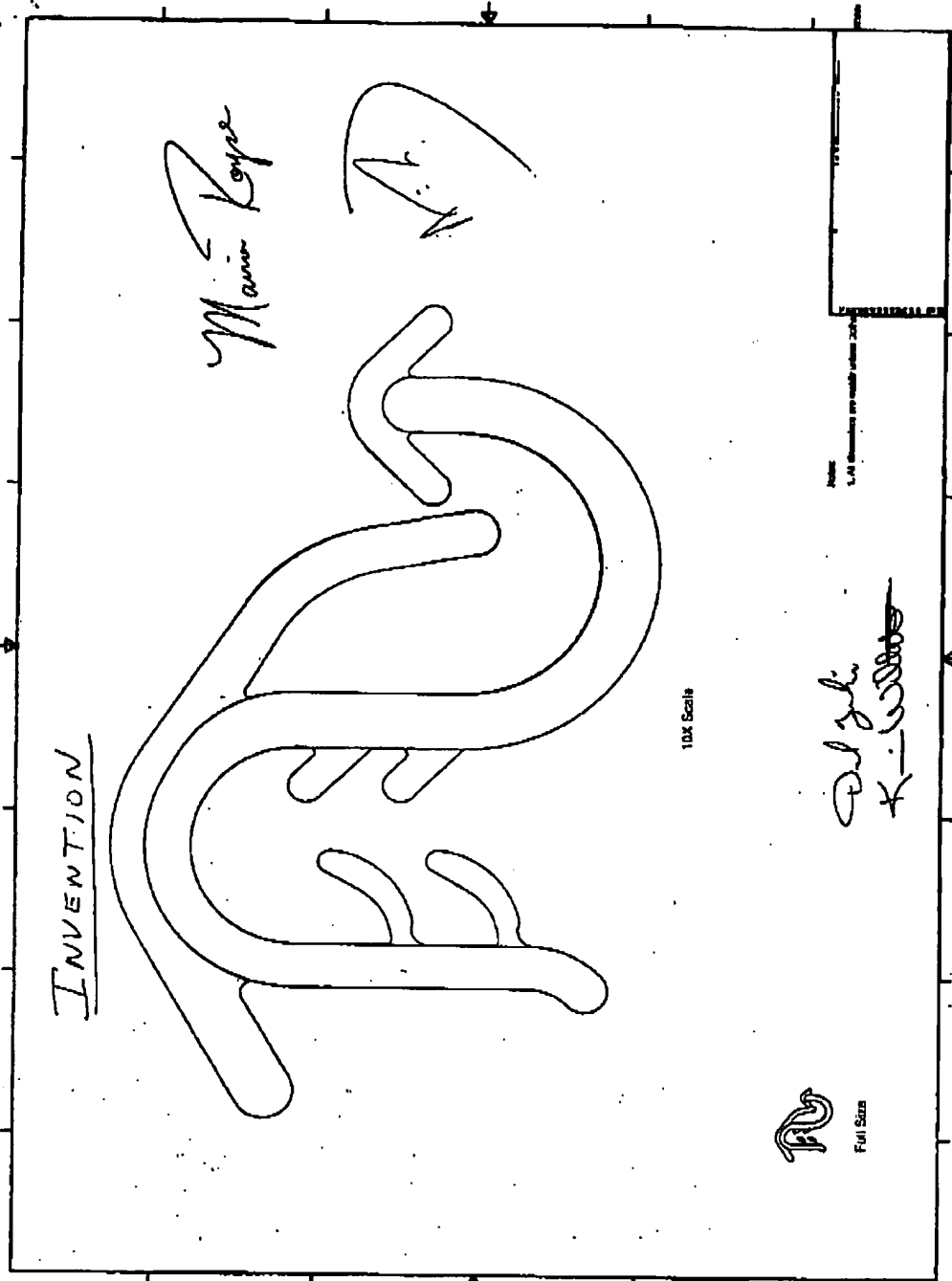
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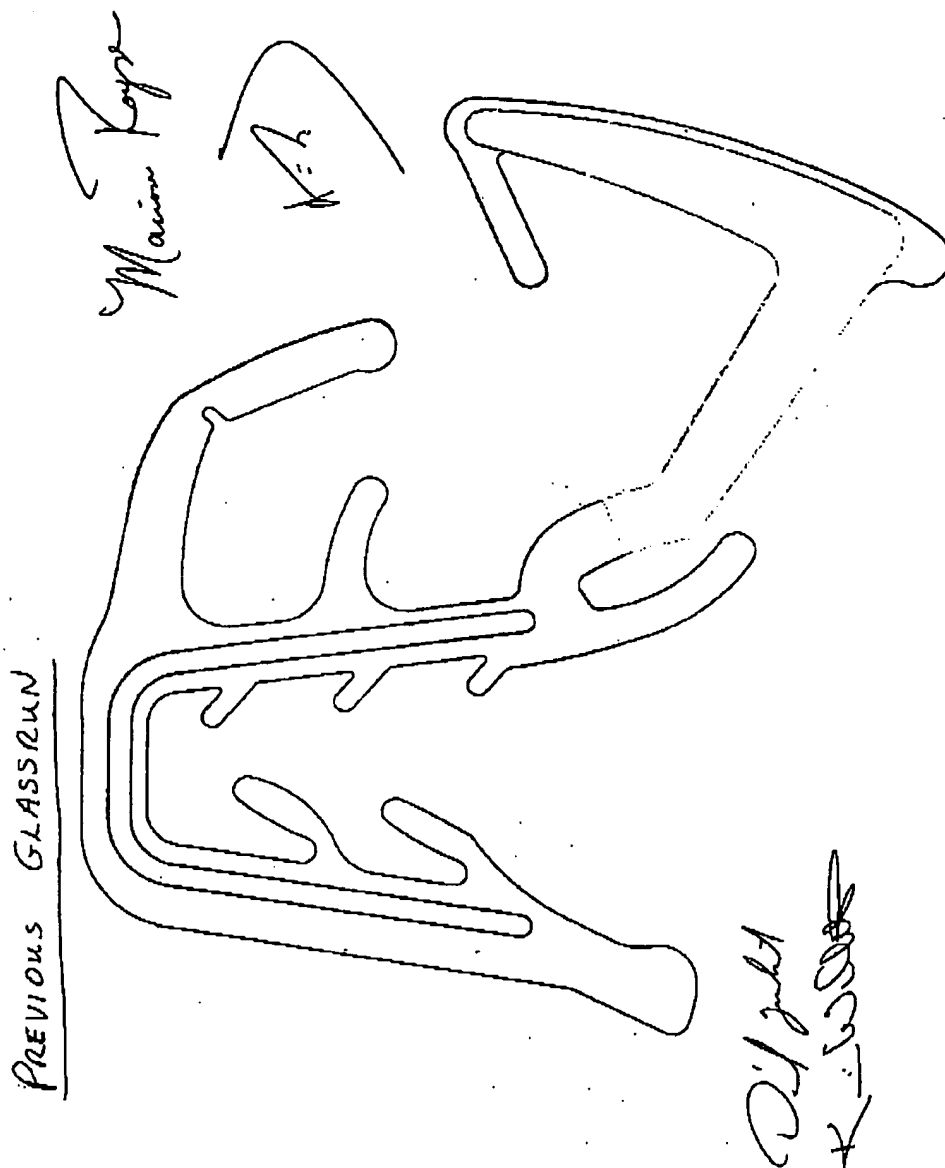
David T. Zwolinski  
David T. Zwolinski

04/19/2005  
Date

Kevin R. Willett  
Kevin R. Willett

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INVENTION DISCLOSURE/RECORD OF INVENTION		PATENT DEPARTMENT CASE NO. <b>BTR-084</b>	
SUBSIDIARY OR DIVISION <b>SSTC</b>		ADDRESS <b>1200 STOCK CREEK BLVD ROCKFORD, TN 37853</b>	
1. INVENTORS	A	INVENTOR (NAME IN FULL) David Zwolinski	TEL. NO. 865-981-7357
			FAX NO. 865-573-0786
	ADDRESS (STREET AND NUMBER)		2200 Stock Creek Blvd, Rockford, TN 37853
	B	INVENTOR (NAME IN FULL) Kevin Willer	TEL. NO. 865-981-7357
			FAX NO. 865-573-0786
	ADDRESS (STREET AND NUMBER)		2200 Stock Creek Blvd, Rockford, TN 37853
C	INVENTOR (NAME IN FULL)	TEL. NO.	FAX NO.
	ADDRESS (STREET AND NUMBER)		
2. TITLE OF INVENTION		Serpentine Glass Seal	
3. PURPOSE OF INVENTION		Special design to maximize strength in a seal to function the same as a seal that requires a metal reinforcement. This design also minimizes stress inducers caused by sharp corners typically found on rigid type seals.	
4. CONCEPTION DATE		DATE	RECORDED (WHERE, WHEN, HOW) PROJECT 0139B - DRAWING IN FILE
5. FIRST DRAWING DATE (IF ANY)		DATE	MADE (WHERE, WHEN, HOW) Tech Center
		PRESENT LOCATION OF DRAWING (SUBMIT COPY) Project 0139B TRACKING FILE (0139B- )	

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<b>6. FIRST WRITTEN DESCRIPTION</b> (IF OTHER THAN THIS DISCLOSURE)	DATE TYPE OF DESCRIPTION (LAB NOTEBOOK, MEMO, ETC.) INVENTION DISCLOSURE	
	PRESENT LOCATION OF DESCRIPTION (INCLUDE ANY LAB NOTEBOOK NUMBERS) HERE	
<b>7. DATE OF FIRST DISCLOSURE</b> (ORAL OR WRITTEN)	DATE TO WHOM DISCLOSED JOHN RIGBY	TELEPHONE 865-181-7509
	DATE TO WHOM DISCLOSED	TELEPHONE
<b>8. FIRST TEST OF PRODUCT, PROCESS OR EQUIPMENT</b>  GIVE DATES AND LOCATION OF RECORDS OF ANY LABORATORY OR PLANT SCALE WORK WHICH HAS BEEN DONE TO PROVE OPERATIVENESS AND SUBMIT PHOTOGRAPHS, PHOTOCOPIES, AND OTHER DOCUMENTATION.	DATE OF TEST LOCATION OF DATA	
	NAMES OF WITNESSES TO ABOVE	TELEPHONE
<b>9. DETAILED DESCRIPTION OF INVENTION</b>  PLEASE USE ADDITIONAL SHEETS AS NECESSARY TO COMPLETE THIS SECTION. DRAWINGS ILLUSTRATING THE INVENTION SHOULD BE SUBMITTED. WHEN MORE THAN ONE DRAWING IS USED, THE DRAWINGS SHOULD BE NUMBERED AND REFERRED TO BY NUMBER IN THE WRITTEN DESCRIPTION. DRAWINGS SHOULD BE SIGNED BY INVENTOR, DATED, AND WITNESSED. THREE COPIES OF EACH DRAWING SHOULD BE SUBMITTED WITH THIS DISCLOSURE.	The standard design for a glass retention seal utilizes a "square" channel to hold the glass in the proper position. This design reduces stresses inherently formed when producing a "square" shape. By removing all corners in the design a uniform loading can be achieved. The shape processes easier than a square shaped seal. By distributing the stresses due to loading a stronger and more durable product can be manufactured.	

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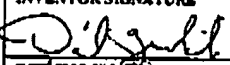
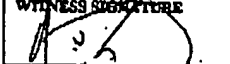
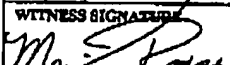


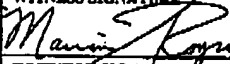
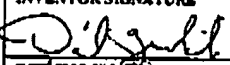
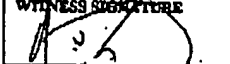
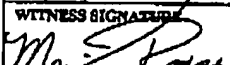
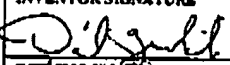
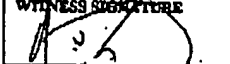
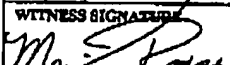


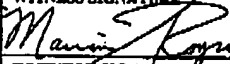


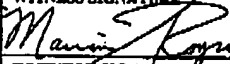
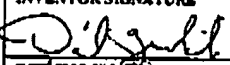
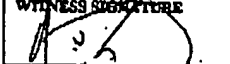
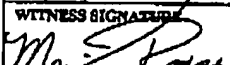
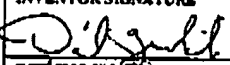
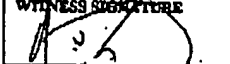
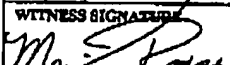
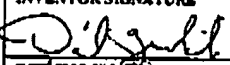
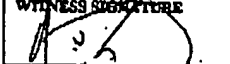
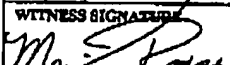


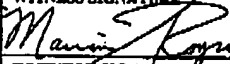


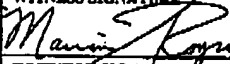


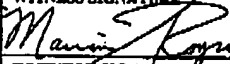
<b>10. EXPECTED SCOPE OF INVENTION</b> STATE THE RANGE AND PREFERRED VALUES OF ALL VARIABLES SUCH AS TEMPERATURE, TIME, PRESSURE, MATERIALS, WEIGHT, SIZE, WIDTH, HEIGHT, THICKNESS, DENSITY, ETC.	
<b>11. UTILITY OF INVENTION</b> STATE HOW, WHERE AND TO WHAT EXTENT THIS INVENTION CAN BE USEFULLY APPLIED.	This design can be utilized in any flange mounted weather seal.
<b>12. NOVEL FEATURES OF INVENTION</b> LIST KNOWN PRIOR ART INCLUDING PRODUCTS, PATENTS AND LITERATURE REFERENCES. STATE DISTINCTION BETWEEN THIS INVENTION AND THE KNOWN PRIOR ART.	Full Radius in all corners. Typically square.
<b>13. NON-OBVIOUSNESS OF INVENTION</b> STATE HOW AND TO WHAT EXTENT NOVEL FEATURES ARE AN ADVANTAGE AND ARE NOT OBVIOUS TO OTHERS SKILLED IN THE ART.	Designers of automotive weather seals typically use past designs which incorporate square corners

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<b>14. FURTHER EXPLORATORY OR DEVELOPMENT WORK NEEDED.</b> INCLUDE COST ESTIMATE	New seal is presently being developed to utilize this design. P131 A-Filler																																																												
<b>15. COMPETITIVE CONSIDERATIONS</b> HOW CAN WE PREVENT OUR COMPETITORS FROM CIRCUMVENTING THIS INVENTION?																																																													
<b>16. IMPORTANT SIGNATURES OF INVENTORS AND WITNESSES</b> WITNESSES SHOULD UNDERSTAND THE TECHNICAL SUBJECT MATTER OF THE INVENTION.	<table border="1"><tr><td data-bbox="626 795 662 1024"><b>A</b></td><td data-bbox="662 795 1341 1024"><table border="1"><tr><td>INVENTOR SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td>865-981-7357</td><td></td></tr><tr><td>WITNESS SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td>(865) 981-7309</td><td></td></tr><tr><td>WITNESS SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td>865-981-7318</td><td></td></tr></table></td></tr><tr><td data-bbox="626 1024 662 1245"><b>B</b></td><td data-bbox="662 1024 1341 1245"><table border="1"><tr><td>INVENTOR SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td>865-981-7364</td><td></td></tr><tr><td>WITNESS SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td>(865) 981-7309</td><td></td></tr><tr><td>WITNESS SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td>865-981-7318</td><td></td></tr></table></td></tr><tr><td data-bbox="626 1245 662 1476"><b>C</b></td><td data-bbox="662 1245 1341 1476"><table border="1"><tr><td>INVENTOR SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td></td><td></td></tr><tr><td>WITNESS SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td></td><td></td></tr><tr><td>WITNESS SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td></td><td></td></tr></table></td></tr></table>	<b>A</b>	<table border="1"><tr><td>INVENTOR SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td>865-981-7357</td><td></td></tr><tr><td>WITNESS SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td>(865) 981-7309</td><td></td></tr><tr><td>WITNESS SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td>865-981-7318</td><td></td></tr></table>	INVENTOR SIGNATURE	TEL. NO.	DATE		865-981-7357		WITNESS SIGNATURE	TEL. NO.	DATE		(865) 981-7309		WITNESS SIGNATURE	TEL. NO.	DATE		865-981-7318		<b>B</b>	<table border="1"><tr><td>INVENTOR SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td>865-981-7364</td><td></td></tr><tr><td>WITNESS SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td>(865) 981-7309</td><td></td></tr><tr><td>WITNESS SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td>865-981-7318</td><td></td></tr></table>	INVENTOR SIGNATURE	TEL. NO.	DATE		865-981-7364		WITNESS SIGNATURE	TEL. NO.	DATE		(865) 981-7309		WITNESS SIGNATURE	TEL. NO.	DATE		865-981-7318		<b>C</b>	<table border="1"><tr><td>INVENTOR SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td></td><td></td></tr><tr><td>WITNESS SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td></td><td></td></tr><tr><td>WITNESS SIGNATURE</td><td>TEL. NO.</td><td>DATE</td></tr><tr><td></td><td></td><td></td></tr></table>	INVENTOR SIGNATURE	TEL. NO.	DATE				WITNESS SIGNATURE	TEL. NO.	DATE				WITNESS SIGNATURE	TEL. NO.	DATE			
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